

**REMARKS****I. General**

The issues outstanding in the instant application are as follows:

- The Restriction Requirement has been made Final.
- The drawings stand objected to under 37 C.F.R. § 1.83(a).
- The disclosure is objected to for informalities.
- Claims 11, 28 and 38 are objected to for informalities.
- Claim 28 stands rejected under 35 U.S.C. §112, second paragraph.
- Claims 1, 2, 3, 6, 7 and 22 through 25 stand rejected under 35 U.S.C. 102 as anticipated by “A Low Distortion PIN Diode Switch Using Surface Mount Devices”, Agilent Technologies, Application Note 1049, pages 1-10, 1999 (which will hereinafter be referred to as the “*Agilent Reference*”);
- Claims 8-15, 26 and 27 are objected to as being dependent upon a rejected base claim.
- Claims 37-46 are allowed.

First, Applicants would like to express their appreciation for the indication of allowability of claims 8-15, 26 and 27 and allowance of claims 37-46. However, Applicants hereby respectfully traverse the outstanding rejections of the claims, and request reconsideration and withdrawal of the outstanding rejections in light of the amendments and remarks contained herein. Each of claims 7, 11, 12, 28 and 38 have been amended only for cosmetic purposes resolving minor informalities and typographical errors and/or for purposes of clarification only, and not for a substantial reason related to patentability. Claim 26 has been amended above to place it in independent form. No new matter has been added by any of these amendments. Claims 1-48 are currently pending in this application.

**II. The Restriction Requirement has been made Final.**

Applicants note that the Examiner has made the restriction requirement of January 27, 2003 final. Under 37 C.F.R. 1.144, Applicants may petition the Commissioner to review the requirement. Applicants note that the petition may be deferred until after final action or allowance of the claims of the elected invention, but not later than appeal. Thereby, Applicants reserve the right to file a petition to the Commissioner to review the requirement.

**III. Objection to the Drawings**

The Examiner has objected to the drawings as failing to show the “third control signal” of Claims 10 and 28 and the “third attenuation control signal” of claim 43. Applicants respectfully point out that M.P.E.P. § 608.02(f) provides that the requirement that all modifications described must be illustrated does not apply to a mere reference to minor variations. Further, Applicants respectfully submit that it is not necessary that every detail of an invention be illustrated by the drawing, unless the form of the device is the principal of the invention, *Sterns v. Tinker & Rasor*, 116 USPQ 222, 227 (1958).

Nevertheless, Applicants submit new drawing, FIGURE 2A. The Brief Description of the Drawings is amended above to reflect inclusion of this FIGURE and the paragraph of the specification beginning on page 11, line 24, has been amended to refer to the new drawing and specifically to the second and third control signals, I<sub>2</sub> and I<sub>3</sub>. No new matter is introduced by entry of the new FIGURE 2A as all matter in FIGURE 2A is disclosed in FIGURE 2 and/or the description of FIGURE 2 in the specification, specifically in the paragraph of the specification beginning on line 24 of page 11. FIGURE 2A has been added by rearrangement of the various FIGURES and submission of 3 replacement sheets of drawings. As each identified instance of informality has been corrected with a corresponding proposed amendment, Applicants believe that the objection to the drawings has been overcome, and that this objection should be withdrawn.

**IV. Objection to the Specification.**

The specification stands objected to for informalities. In response, Applicants have amended the specification, namely the paragraph beginning on line 16 of page 10, in

accordance with the suggestions provided by the Examiner in the Office Action. Also, the paragraphs beginning at page 8, line 10, and on line 9 of page 10 have been amended above to replace “Resister” with “Resistor” and the paragraph beginning on line 16 of page 13 has been amended for clarity and to correct typographical errors. Each identified instance has been corrected with a corresponding amendment. No new matter has been entered. Thus, Applicants believe that the objection to the specification has been overcome, and that this objection should be withdrawn.

#### **V. Objection to the Claims**

Claims 11, 28 and 38 are objected to for informalities. In response, Applicants have amended claims 11, 28 and 38 to address the listed informalities. Each identified instance of informality has been corrected with a corresponding amendment, or otherwise addressed below.

Please, note that the suggestion to amend the term “second inductor” to read “first inductor” in claim 11 has not been adopted. Instead, Applicants have amended claims 7, 11 and 12 to make the references to the inductors more generic, and to clarify interrelations where more than one inductor is present in a claim chain (claims 11 and 12).

As to claim 28, the suggestion to amend the term “a first diode” to read “the first diode” has not been adopted, as the need for such an amendment is obviated by the correction of the typographical error resulting in claim 28 depending from claim 27, rather than claim 25, as was patently intended by the recitation of elements of claim 28, which is further discussed below in relation to the §112 rejection of claim 28.

The suggested amendment to claim 38 has been made, to correct a typographical error, changing “said at least one series diode” to read to “said at least two diodes disposed in a series configuration”.

Claims 7, 11, 12, 28 and 38 have been amended only for the purpose of resolving the cited informalities, and not for the purpose of narrowing their scope in the face of prior art or to overcome any rejections of the claims. No new matter has been entered. As these

amendments address the recited informalities, Applicants respectfully request the withdrawal of the objection of record.

#### **VI. Rejections under 35 U.S.C. §112, second paragraph**

Claim 28 stands rejected under 35 U.S.C. §112, second paragraph as being indefinite. The Office Action points out that the first six lines are redundant subject matter with respect to claim 26, from which it was initially indicated as depending, rendering the claim vague. Additionally, the Office Action points out that phrases of claim 28 conflict with phrases of claim 26. In response, Applicants have amended claim 28 to more accurately and precisely define the invention by correcting the typographical error resulting in claim 28 originally depending from claim 27 rather than claim 25, as is clearly intended by virtue of claim 28's repetition of the first six lines of claim 26. Claim 28 has been amended only for the purpose of correcting a typographical error and overcoming the subsequent 35 U.S.C. § 112, second paragraph informalities, and not for the purpose of narrowing its scope in the face of prior art. No new matter has been entered. As each element of indefiniteness cited by the Office Action has been addressed with this typographical correction, Applicants respectfully request the rejection of claim 28 under 35 U.S.C. §112, second paragraph be withdrawn.

#### **VII. Rejections under 35 U.S.C. §102(b)**

Claims 1, 2, 3, 6, 7 and 22 through 25 stand rejected under 35 U.S.C. §102 as anticipated by the *Agilent Reference*. Applicants respectfully traverse the rejection of the present claims directed to a controllable attenuator based upon the switch illustrated in the *Agilent Reference*.

#### **The recited reference does not teach all claimed limitations.**

It is well settled that to anticipate a claim, the reference must teach every element of the claim, see M.P.E.P. §2131. Moreover, in order for a prior art reference to be anticipatory under 35 U.S.C. § 102 with respect to a claim, "[t]he identical invention must be shown in as complete detail as is contained in the . . . claim," see M.P.E.P. § 2131, citing *Richardson v. Suzuki Motor Co.*, 9 U.S.P.Q.2d 1913 (Fed. Cir. 1989) Applicants respectfully assert that the rejection does not satisfy at least these requirements.

Claim 1 and claim 22, as amended, each define “the predetermined network configuration provides a constant DC bias voltage at a cathode of each diode of said plurality of diodes.” The *Agilent Reference* does not disclose at least this limitation. The Examiner’s attention is respectfully directed to the present specification. On page 10, lines 1 through 4, the present specification provides “Capacitors C1<sub>2</sub> and C2<sub>2</sub> ... preferably provide DC blocks at the attenuator input and output ports [and] ... cooperate with inductors L1<sub>2</sub> and L2<sub>2</sub>, respectively, to form high pass filters.” At lines 24 and 25 of page 10, the present specification also provides “inductors L1<sub>2</sub> and L2<sub>2</sub> effectively providing a DC short to ground at the common cathode nodes.” As shown in FIGURE 6 of the *Agilent Reference* inductors L<sub>1</sub> and L<sub>3</sub> only provide a DC ground without DC isolation from circuitry coupled to the RF ports, e.g. as by capacitors C1<sub>2</sub> and C2<sub>2</sub> of present FIGURE 2. Therefore, the switch of the *Agilent Reference* fails to teach a circuit providing the claimed “constant DC bias voltage at a cathode of each diode of said plurality of diodes” of claim 1 and claim 22 as amended. Therefore, Applicants respectfully assert that at least for the above reasons, generic independent claims 1 and 22 are patentable over the 35 U.S.C. §102 rejection of record. Furthermore, there are great differences between the claims and the prior art of record, and a person of ordinary skill in the art considering the prior art would not find these differences obvious.

Claims 2, 3, 6 and 7 ultimately depend from independent claim 1 and claims 23-25 ultimately depend from independent claim 22, and thus inherit all limitations of their respective base claims. Therefore, each of claims 2, 3, 6, 7 and 23-25 set forth features and limitations not recited by the *Agilent Reference*. Thus, Applicants respectfully assert that for the reasons advanced above in addressing the anticipation rejections of claims 1 and 22, claims 2, 3, 6, 7 and 23-25 are patentable over the 35 U.S.C. § 102 rejection of record.

Furthermore, many of these dependent claims define elements not present in the cited art. For example, Applicants note that claims 1 and 22 each define “a plurality of diodes disposed in a predetermined network configuration” and dependent claims 3 and 24 each define “wherein said predetermined network configuration comprises a  $\pi$  network.” In contrast, FIGURE 6 of the *Agilent reference* does not show a plurality of diodes which are themselves disposed in a  $\pi$  network configuration as claimed by claims 3 and 24 through their respective independent base claims, 1 and 22.

**VIII. Conclusion**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. According, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2380, under Order No. 49581/P030US/10104106 from which the undersigned is authorized to draw. The examiner is respectfully requested to call the below listed attorney if he can be of assistance in furthering prosecution of the present application.

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Respectfully submitted,

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